

ULTRA-COARSE, MONOCRYSTALLINE TUNGSTEN CARBIDE
AND A PROCESS FOR THE PREPARATION THEREOF,
AND HARDMETAL PRODUCED THEREFROM

ABSTRACT OF THE DISCLOSURE

A process is described for the preparation of tungsten and/or molybdenum metal powder or carbide by reducing and optionally carburizing treatment of tungsten and/or molybdenum oxide powder in the presence of alkali metal compounds, wherein at least two alkali metal compounds are used in a ratio so that mixed alkali tungstate or molybdate potentially formed in an intermediate step $((\text{Li}, \text{Na}, \text{K})_2 \text{WO}_z, (\text{Li}, \text{Na}, \text{K})_2 \text{MoO}_z)$ has a melting point of less than 550°C , wherein z is from 3 to 4.

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